

In re the Appln. of: Vellore T. Vetrivelkumaran
Appln. No.: 09/681,844

REMARKS

This Amendment relates to the above-identified Application with Serial No. 09/681,844, with filing date June 15, 2001. Claims 1-48 are pending in this Application, stand rejected, and are at issue herein. Claims 1-5, 7-12, 15-22, 28-33 and 38-48 stand rejected under 35 U.S.C. §102(e) as being anticipated by Raz et al., U.S. Pub. No. 20020138640 (hereinafter "*Raz*"). Claims 6, 13-14, 23-27 and 34-37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Raz* in view of Eylon et al., U.S. Pub. No. 20010034736 (hereinafter "*Eylon*").

Claims 1, 15, 23, 28, 39, 40, 41 and 47 have been amended. Support for the amendments can be found in the Specification on at least pages 6-7 and Figure 6. No new matter is therefore presented.

The Applicant would like to address the rejections of the Office Action and respectfully requests reconsideration of the rejections based at least in part on the traversal provided below.

Rejection of Claims 1-5, 7-12, 15-22, 28-33 and 38-48 under 35 U.S.C. §102(e) - Raz

Claims 11-5, 7-12, 15-22, 28-33 and 38-48 stand rejected under 35 U.S.C. §102(e) over *Raz*. However, as more fully explained below, *Raz* fails to describe the invention as now claimed by the Applicant because, *inter alia*, *Raz* fails to teach an internal intercepting component as claimed

Raz provides "a predictive streaming application 160" that is located in a principal server to identify code modules that should be streamed to a client. Page 3, paragraphs 0029-0032. Importantly, *Raz* provides that a client 220 initially accesses the principal server 110 and starts the streaming of software application 120. Page 4, paragraph 0037. After the principal server starts the streaming, a client submits a request to the principal server via intermediate servers. Page 3, paragraphs 0029-0032. A primary purpose of the predictive streaming application 160 is to anticipate what will be required by a client at various stages of execution of a streaming application,

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which can vary and be nonlinear and user dependent. The predictive streaming application 160 streams code modules prior to their execution or need at the client. Page 4, paragraphs 0034-0035. The presence or absence of cached components is made by the streaming communication manager 170. Paragraph 0037.

Claims 1 and 15 have been amended to add "receiving a request from by an internal intercepting component of another computing device, the internal intercepting component capable of intercepting the request when it is internal to the another computing device and redirecting the request, the request for executing a component of the application program." *Raz* fails to teach an internal intercepting component that intercepts a request and redirects the request as claimed because *Raz* instead teaches a client device initially accessing a principal server to start a streaming software application. No intercepting or redirecting of a request is taught.

Likewise, Claim 38 has been amended to provide "a component to execute the application program component in response to a request, the request from by an internal intercepting component capable of intercepting and redirecting the request, the component to execute the application program component in lieu of execution by the original computing device." Claim 41 has been amended to provide "a client computing device communicatively connected to a network, the client computing device including an internal intercepting component capable of intercepting and redirecting a request." And, Claim 47 has been amended to provide "in response to a request from an internal intercepting component, the internal intercepting component capable of intercepting and redirecting the request, the request to execute the cached application program or the cached component, executing, at the caching computing device, the application program or the component thereof."

Each of Claims 38, 41 and 47 include an internal intercepting component that is capable of intercepting and redirecting a request. *Raz* fails to teach or suggest an internal intercepting component as claimed and Claims 1, 15, 38, 41 and 47 are, therefore, allowable. Claims 2-14,

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16-22, 39-40, 42-46 and 48 depend from Claims 1, 15, 38, 41 and 47 respectively, and are allowable with Claims 1, 15, 38, 41, and 47 for at least this reason.

Claim 28 has been amended for purposes of clarity only and provides “A computing device comprising: a cacheable application program component of an application program that has been cached from an original computing device; and, a redirection component to intercept requests for an application program component and direct any of the requests that relate to the application program component that has been cached to the application program component that has been cached.” As discussed above, *Raz* fails to teach an intercepting component. Rather, *Raz* teaches a client computer that directs execution of a streaming application over a network. Because the principal server initiates the streaming application, there is no teaching of an intercept component that intercepts after an application has been initiated by a client without interaction with a principal server.

Moreover, the Office Action, Page 7, fails to provide a rejection of Claim 28 as required. Rather, the paragraph provides that “Claim 15 and 28, *Raz et al* teach a machine-readable medium and a computing device with similar limitations as claim 1 above. See the rejection made on claim 1 above.” Claim 1, however, prior to the current amendment did not address a component that would “intercept requests” as claimed. Accordingly, the Office Action fails to provide the basis for a 102(e) rejection. Moreover, because the Office Action is incomplete, a next office action would therefore be of a non-final nature unless an allowance is provided.

Rejection of Claims 6, 13-14, 23-27 and 34-37 under 35 U.S.C. §103(a) - Raz in view of Eylon

Applicant respectfully traverses the rejection of Claims 6, 13-14, 23-27 and 34-37 as being obvious under 35 U.S.C. §103(a) over *Raz* view of *Eylon*. First, *Eylon* does not teach what *Saxena* lacks. As discussed above, *Raz* fails to teach “an internal intercepting component” as taught in Claim 1, upon which Claims 6, and 13-14 depend.

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Moreover, regarding Claims 6, *Raz* in view of *Eylon* fails to teach “assessing whether the usage is sufficient to justify caching of the cacheable application program component by the caching computing device.” Specifically, *Eylon* teaches a dynamic statistical knowledge base and predictive streaming engine to select which streamlets and an order of streamlets to forward to clients. The knowledge base is formed by analyzing past and present behavior of a user, user group and subsets within a group. Thus, streamlets are sent prior to an application’s attempt to access them. *Eylon*, Page 4, paragraph 0036. Importantly, *Eylon* teaches away from caching application program components. Rather, *Eylon* teaches having each required streamlet available to a client before the streamlet is needed. Therefore, *Eylon* teaches away from the combination of *Eylon* with *Raz*. Without the combination of *Eylon* and *Raz* the feature of assessing usage to justify caching is nonobvious. Accordingly, Claim 6 is allowable.

Regarding Claim 23, *Raz* combined with *Eylon* fail to teach a machine readable medium as claimed that performs acts including “tracking usage by a client computing device of a cacheable application program component of an application program stored on an original computing device; assessing whether or not the usage is sufficient to justify caching any of the cacheable application program components from the original computing device; and, caching any of the application program components from the original computing device that the usage of which has been assessed as sufficient to justifying caching.”

Specifically, *Raz* combined with *Eylon* fail to teach the element “assessing whether or not the usage is sufficient to justify caching any of the cacheable application programming program components from the original computing device.” As discussed above, *Eylon* teaches away from caching application program components. Rather, *Eylon* teaches having each required streamlet available to a client before the streamlet is needed. The concept of caching teaches away from “dynamic” type predictive streaming of *Eylon* because the caching determination relates to storing program components so that dynamic predictive streaming becomes unnecessary. Moreover, the dynamic predictive streaming taught by *Eylon* may benefit a client by having

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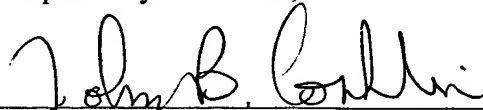
streamlets available immediately, but *Eylon* fails to address the issues of bandwidth problems causes by transmitting streamlets automatically prior to a client's need for them. Claims 6 and 23 provide for caching to avoid such bandwidth problems, the caching according to the assessment made as claimed. For at least these reasons, Claims 6 and 23 are allowable and non-obvious over the combination of *Raz* with *Eylon*. Claims 24-27 depend from Claim 23 and are allowable with Claim 23 for at least this reason. Claims 34-37 also recite tracking usage and caching accordingly and are believed allowable for this reason in addition to their allowability due to their dependency from Claim 28, which is allowable as discussed with reference to *Raz*, above.

CONCLUSION:

Claims 1-48 are pending. Claims 1, 15, 23, 28, 39, 40, 41 and 47 have been amended. No new matter has been introduced. The rejection of Claims 1-5, 7-12, 15-22, 28-33 and 38-48 under 35 U.S.C. §102(e) has been traversed; and the rejection of Claims 6, 13-14, 23-27 and 34-37 under 35 U.S.C. §103(a) has been traversed.

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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